# **Virginia Title V Operating Permit**

This permit is based upon Federal Clean Air Act acid rain permitting requirements of Title IV, federal operating permit requirements of Title V; and Chapter 80, Article 1 and Chapter 140 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13,: 10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, 9 VAC 5-80-50 through 9 VAC 5-80-300 and 9 VAC 5-140-10 through 9 VAC 5-140-900 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Permit NumberEffective DateExpiration DateVA-30867January 1, 2003December 31, 2007

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name: Virginia Electric & Power Company doing business as Dominion

Generation, and Old Dominion Electric Cooperative (ODEC)

Mailing Address: 5000 Dominion Boulevard

Glen Allen, VA 23060

Facility Name: Clover Power Station

DEQ Registration Number: 30867

Facility Location: 2.5 miles N of Clover near Route 600 in Halifax Co., VA

AIRS Identification No.: 51-083-0046

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Robert G. Burnley

Director, Department of Environmental Quality

Minor permit modification issued May 14, 2004

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# I. Facility Information

#### Permittee

Virginia Electric & Power Company doing business as Dominion Generation, and Old Dominion Electric Cooperative (ODEC)

#### **Responsible Official**

Mr. Donald C. Craft Station Director

## **NOx Allowance Budget Trading Authorized Account Representative**

Mac Deacon, Jr. - Vice President, Fossil & Hydro USEPA AAR ID number 600830

#### **Facility**

Clover Power Station, 2.5 miles north of Clover near Route 600 in Halifax County

#### **Contact Person**

Pamela F. Faggert Vice President & Chief Environmental Officer Innsbrook Technical Center 5000 Dominion Boulevard Glen Allen, Virginia 23060 (804) 273-3467

**AIRS Identification Number:** 51-083-0046

**ORIS CODE:**7213

NATS Facility Identification Number: 007213000001, 007213000002

Facility Description: SIC Code 4911 – The Clover Power Station operates two pulverized coal fired boilers nominally rated at 4,085 MMBtu/hr each for the purpose of generating electricity. Each main boiler is equipped with a fabric filter for particulate emissions control, a wet limestone flue gas desulfurization system for SO<sub>2</sub> control and low NOx burners with overfire air to control NOx emissions. A SNCR is installed (voluntarily) on each boiler. The equipment associated with the main boilers includes coal, limestone, lime, ash and fuel storage and handling systems. The startup fuel for the main boilers is No. 2 fuel oil. The facility also has one No. 2 fuel oil fired auxiliary boiler nominally rated at 213.9 MMBtu/hr, which is used to provide steam during main boiler start-up, if needed. As an alternative to using No. 2 fuel oil, the permittee may use fuel supplier certifications of "low sulfur diesel fuel" containing no greater than 0.05% sulfur to demonstrate compliance with the annual fuel sulfur content restrictions. Two emergency generators are available to provide electricity if needed. An alternative operating scenario is to haul ash and/or FGD by-product directly to a marketer rather than to the landfill.

# **II.** Emission Units

Equipment to be operated consists of:

# A. Significant Emissions Units (for description purposes only)

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Fuel Burning Equipment						Permit Date	
ES-1	EP-1	Combustion Engineering	4,085	fabric filter	BH-1	particulates	September 4,
		Pulverized coal boiler	MMBtu/hr	wet limestone FGD	FGD-1	SO <sub>2</sub>	2002
			(nominally)	low NOx burners w/ overfire air	LNB-1	NOx	
ES-2	EP-2	Combustion Engineering	4,085	fabric filter	BH-2	particulates	September 4,
		Pulverized coal boiler	MMBtu/hr	wet limestone FGD	FGD-2	$SO_2$	2002
			(nominally)	low NOx burners w/ overfire air	LNB-2	NOx	
ES-3	EP-3	Combustion Engineering No. 2 fuel oil fired boiler	213.9 (nominally)				September 4, 2002
Coal and A	sh Handling		(nonmany)			I	2002
ES-4 (a-e)	-	Coal handling, storage and crushing	varies	-	-	particulates	September 4, 2002
ES-4 (f-o)	EP-4 (f-o)	Coal handling, storage and crushing	varies	(10) Johnson March fabric filters	FF-4 (f-o)	particulates	September 4, 2002
ES-7 (a-c)	EP-7 (a-c)	Fly ash handling	varies	(2) Mikropul and (1) Zurn fabric filters	FF-7 (a-c)	particulates	September 4, 2002
Lime and I	Limestone Ha	andling					
ES-5 (a)	-	Limestone storage and handling	varies	-	-	particulates	September 4, 2002
ES-5 (b-d)	EP-5 (b-d)	Limestone storage and handling	varies	(5) I d M I C l Cl	FF-5 (b-d)	particulates	September 4, 2002
ES-6 (a-b)	EP-6 (a-b)	Lime storage and handling	varies	(5) Johnson March fabric filters	FF-6 (a-b)	particulates	September 4, 2002
Emergency Generators							
IS-1	IP-1	Emergency diesel generators, 2 units	14.66 MM Btu/hr (nominally)	-	-	-	September 4, 2002

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#### **B.** Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
IS-2	"A" and "B" #2 fuel oil storage tanks	9 VAC 5-80-720 B	VOC	
IS-3	#2 fuel oil storage tanks, 2 units	9 VAC 5-80-720 B	VOC	
IS-4	Lube oil/used oil/hydraulic oil systems	9 VAC 5-80-720 B	VOC	
IS-5	Mobile equipment gasoline storage tank	9 VAC 5-80-720 B	VOC	
IS-6	Two kerosene tanks	9 VAC 5-80-720 B	VOC	
IS-7	Two oil/water separators	9 VAC 5-80-720 B	VOC	
IS-8	Degreaser (non-halogenated)	9 VAC 5-80-720 B	VOC	
IS-9	Antifreeze usage on coal conveyors	9 VAC 5-80-720 B	VOC	
IS-10	Roadway fugitive emissions	9 VAC 5-80-720 B	PM/PM10	

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

# III. Main Coal Boiler Requirements – (ES1 and ES2)

# A. Main (Primary) Boiler Limitations

- 1. Except where this permit is more restrictive than the applicable requirement, the main boilers shall be operated in compliance with the requirements of 40 CFR 60, Subpart Da. (9 VAC 5-80-110, 9 VAC 5-50-400 and 9 VAC 5-50-410)
- 2. Particulate emissions from each main coal boiler shall be controlled by a fabric filter performing at 99.9 % control efficiency. The fabric filters shall be provided with adequate access for inspection. The fabric filters may be bypassed during low sulfur diesel fuel boiler start-ups to alleviate potential moisture damage to the fabric filters at low start-up temperatures. The fabric filters shall operate at all times that coal is being fired in the main boilers except for thirty (30) minutes during each start-up. The fabric filters shall be equipped with a device to continuously measure pressure drop.

(9 VAC 5-80-110, Condition I.4 of September 4, 2002 Permit, and 40 CFR 60.42a(a)(2))

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3. Sulfur dioxide emissions from each main coal boiler shall be controlled by a flue gas desulfurization system having an efficiency of at least 94 % on a 30-day rolling average and achieving a SO<sub>2</sub> emissions rate of 0.10 lbs/MMBtu on an annual average. The flue gas desulfurization system shall be operational at all times that coal is being burned in the boiler, including start-up and shut-down. The control systems shall be provided with adequate access for inspection. (9 VAC 5-80-110, Condition I.5 of September 4, 2002 Permit, 40 CFR 60.43a(a) (1) and 40 CFR 60.43a(g))

- 4. Nitrogen oxide (NOx) emissions from the primary coal boilers shall be controlled by Pollution Minimum burners and boiler design with advanced over-fire air for low NOx combustion. The NOx reduction requirement must be at least 65 percent reduction of potential combustion concentration. (9 VAC 5-80-110, Condition I.6 of September 4, 2002 Permit, and 40 CFR 60.44a(a)(2)
- 5. The approved fuels for the main boilers are bituminous coal and No. 2 fuel oil (see Condition III.A.7). A change in the fuels may require a permit to modify and operate. (9 VAC 5-80-110 and Condition I.28 of September 4, 2002 Permit)
- 6. The maximum sulfur content of the coal to be burned in the primary boilers shall not exceed 1.3 % by weight on an annual average and 1.7 % by weight per shipment. "Shipment" is defined for this condition as a continuous, single delivery of fuels or blend of fuels from the same origin. The permittee shall maintain records of all coal shipments received, indicating sulfur content per shipment. The permittee shall obtain an analysis of the coal sulfur content at least once per shipment. Details of the sampling procedure shall be arranged with the South Central Regional Office. All fuel delivery records and sampling results shall be available on site for inspection by Department of Environmental Quality (Department) personnel and shall be kept current for the most recent five-year period. A summary of the sampling analysis shall be submitted quarterly to the South Central Regional Office. (9 VAC 5-50-410, 9 VAC 5-80-110, and Condition I.29 of September 4, 2002 permit)
- 7. The annual average sulfur content of the No. 2 fuel oil to be burned in the main boilers shall not exceed 0.1 % by weight. As an alternative to this requirement, the permittee may use fuel supplier certifications of "low sulfur diesel fuel" containing no greater than 0.05% sulfur to demonstrate compliance with the annual fuel sulfur content restrictions. A receipt specifying low sulfur diesel fuel may be considered a certification for purposes of this permit.
  - (9 VAC 5-50-410, 9 VAC 5-80-110 and Condition I.31 of September 4, 2002 permit)
- 8. Storage tanks for fuel oil shall be equipped with submerged or bottom fill and each shall be equipped with a conservation vent.
  - (9 VAC 5-80-110 and Condition I.17 of September 4, 2002 permit)
- 9. The following restrictions apply to the main boilers during startup and before the main boilers are brought on line:

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- The auxiliary boiler and either of the main boilers shall operate concurrently for a period not to exceed five (5) hours in any 24-hour period.
- The fabric filters must be placed in service within thirty (30) minutes after coal firing is commenced.
- The SO<sub>2</sub> absorbers must be on-line prior to coal firing.
- The fabric filters may not be bypassed when the main boiler is being fired with coal except for a period of thirty (30) minutes or less.
- (9 VAC 5-80-110 and Condition I.22b of September 4, 2002 Permit)
- 10. The yearly amount of coal to be burned in each boiler shall not exceed 1,431,384 tons, calculated as the sum of each consecutive twelve (12) month period. (9 VAC 5-80-110 and Condition I.15 of September 4, 2002 Permit)
- 11. Emissions from the operation of each primary coal boiler shall not exceed the limits specified below:

Criteria Pollutant	lbs/MMBtu	<u>lbs/hr</u>	tons/yr *
Particulate Matter	0.020	81.7	357.8
PM10	0.018	73.5	322.1
Sulfur Dioxide			1,789 **
?annual average *	0.10	***	-
30-day rolling average	0.156	***	-
Nitrogen Oxide			
30-day rolling average	0.32	N/A	****
Carbon Monoxide	0.10	408.5	1,789.2
<b>Volatile Organic Compounds</b>	0.010	40.9	178.9
Lead	0.00042	1.72	7.5

<sup>\*</sup> All annual emissions limits are based on an annual capacity factor of 100%. Annual emission limits are to be calculated as the sum of each consecutive twelve (12) month period.

\*\*\*\* Emissions of NO<sub>x</sub> from the combined operation of the main coal boilers shall not exceed 10,735.4 tons/year. Annual emission limits are to be calculated as the sum of each consecutive twelve (12) month period.

<sup>\*\*</sup> Based on an SO<sub>2</sub> scrubber removal efficiency of either 95 % applied to an annual average coal sulfur content of 1.3 % by weight or an SO<sub>2</sub> scrubber removal efficiency of at least 94 % applied to an annual average coal sulfur content of 1.0 % or a combination of both.

<sup>\*\*\*</sup> see Condition III.B.2.

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Non-criteria pollutant	lbs/day
Beryllium	0.4
Fluoride (as HF)	784.8
Mercury	3.1
Sulfuric Acid Mist	1,471.2

- (9 VAC 5-80-110, Conditions I.18, I.19a and I.19c of September 4, 2002 Permit, and 40 CFR Subpart Da))
- 12. The maximum SO<sub>2</sub> emission from the main boilers shall not exceed an average of 1,151 pounds per hour for any 3-hour period nor 1,065 pounds per hour for any 24-hour period.
  - (9 VAC 5-80-110 and Condition I.35 of September 4, 2002 Permit)
- 13. Visible emissions from each of the main boiler stacks shall not exceed 10 % opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 20 % opacity. The opacity standard applies at all times, except during periods of start-up, shutdown or malfunction in accordance with 40 CFR, Subpart Da, Section 60.46a.
  - (9 VAC 5-50-80, 9 VAC 5-80-110 and Condition I.24 of September 4, 2002 Permit)
- 14. Boiler emissions shall be controlled by proper operation and maintenance. Boiler operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the manufacturer's operating instructions, at minimum.

(9 VAC 5-80-110)

#### **B.** Main Boiler Monitoring

- 1. Continuous emission monitors (CEMS) shall measure and record the following:
  - the opacity at each main boiler fabric filter outlet,
  - the concentration of SO<sub>2</sub> at the inlet and outlet of each flue gas desulfurization system,
  - NOx at each main boiler stack, and
  - CO<sub>2</sub> or O<sub>2</sub> emitted from each main coal boiler.

The CEMS shall be maintained, located and calibrated with approved procedure in accordance with 40 CFR 60.40b and 40 CFR 60, Subpart Da. A 30-day notification prior to the demonstration of continuous monitoring system performance (and any subsequent notifications) are to be submitted to the South Central Regional Office. (9 VAC 5-80-110 and Condition I.32 of September 4, 2002 Permit)

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- 2. The continuous monitoring data generated by the CEMS on the main boilers shall be used to determine compliance with the emissions and opacity standards. The data capture and reporting requirements of 40 CFR 60, Subpart Da shall apply. The quality assurance provisions of 40 CFR 60 or 40 CFR 75 shall apply. In addition to the requirements of 40 CFR 60, Subpart Da, the permittee shall include the following in the quarterly emissions report:
  - each rolling 3-hour SO<sub>2</sub> emissions rate in excess of 1,151 pounds per hour, based on the averaged sum of emissions from the main coal boilers,
  - each rolling 24-hour SO<sub>2</sub> emissions rate in excess of 1,065 pounds per hour, based on the average sum of emissions from the main coal boilers, and
  - the annual averaged SO<sub>2</sub> and NOx emission rates for each main coal boiler (in lb/MMBtu) taken as the sum of the previous 12 months.
  - (9 VAC 5-80-110 and Condition I.34 of September 4, 2002 Permit)
- 3. The continuous monitoring data generated by the opacity monitor may be used as evidence of violation of the emission standards. These data shall be kept on file and made available to the Department upon request. These monitors are subject to such data capture requirements and quality assurance requirements as prescribed by 40 CFR Part 60.
  - (9 VAC 5-80-110 and Condition I.36 of September 4, 2002 Permit)

# C. Main Boiler Recordkeeping

- 1. The permittee shall obtain a certification from the fuel supplier with each shipment of No. 2 fuel oil. Each fuel supplier certification shall include the following:
  - a. The name of the fuel supplier,
  - b. The date on which the oil was received,
  - c. The volume of fuel oil delivered in the shipment,
  - d. A statement that the oil complies with the American Society for Testing and Materials specifications for No. 2 fuel oil,
  - e. The sulfur content of the oil, and
  - f. Fuel supplier certifications of "low sulfur diesel fuel", if applicable. A receipt specifying low sulfur diesel fuel may be considered a certification for purposes of this permit.

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2. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the South Central Regional Office. These records shall include, but are not limited to:

- a. The monthly and annual throughput of No. 2 fuel oil (in 1000 gallons) or "low sulfur diesel fuel" for each of the main boilers. The annual throughput shall be calculated as the sum of each consecutive twelve (12) month period.
- b. The monthly and annual throughput of coal (in tons) for each of the main boilers. The annual throughput shall be calculated as the sum of each consecutive twelve (12) month period.
- c. All fuel supplier certifications. A receipt specifying low sulfur diesel fuel may be considered a certification for purposes of this permit.
- d. All CEMs records as required by Condition III.B.2.

These records shall be available on site for inspection by the Department and shall be current for the most recent five (5) years. (9 VAC 5-50-50 and 9 VAC 5-80-110)

3. The permittee shall maintain records of the required training including a statement of time, place and nature of training provided. The permittee shall have available good written operating procedures and a maintenance schedule for the boilers. These procedures shall be based on the manufacturer's recommendations, at minimum. All records required by this condition shall be kept on site and made available for inspection by the Department.

(9 VAC 5-80-110)

# **D.** Main Boiler Testing

At a frequency not to exceed once every five years, the permittee shall conduct a stack test for PM and PM-10 from each main boiler to demonstrate compliance with the applicable hourly emission limits contained in this permit. The initial test shall be performed within 180 days after the effective date of this permit. The test shall be conducted and reported and data reduced as set forth in 9 VAC 5-40-30 or 9 VAC 5-50-30 as applicable. The details of the tests shall be arranged with the South Central Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the South Central Regional Office within 60 days after test completion and shall conform to the test report format enclosed with this permit.

(9 VAC 5-80-110, 9 VAC 5-40-30, and 9 VAC 5-50-30)

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# E. Main Boiler Reporting

The permittee shall submit fuel quality reports to the South Central Regional Office, within 30 days after the end of each semi-annual period. This submittal will be arranged with the Department such that the required reports may be incorporated with required quarterly reports. If no shipments of fuel oil were received during the semi-annual period, the semi-annual report shall consist of the dates included in the semi-annual period and a statement that no oil was received during the semi-annual period. If fuel oil was received during the semi-annual period, the reports shall include:

- 1. The dates included in the semi-annual period;
- 2. A copy of all fuel supplier certifications for all shipments of No. 2 fuel oil and of "low sulfur diesel fuel" received during the semi-annual period or a semi-annual summary from each fuel supplier that includes the information specified in III.C.1 for each shipment of No. 2 fuel oil. A receipt specifying low sulfur diesel fuel may be considered a certification for purposes of this permit;
- 3. All CEMs reporting requirements as required in Condition III.B.2; and
- 4. A signed statement from the owner or operator of the facility that the fuel supplier certifications or summaries of fuel supplier certifications represent all of the No. 2 fuel oil and/or "low sulfur diesel fuel" burned or received at the facility.

(9 VAC 5-50-50 and 9 VAC 5-80-110)

# IV. Auxiliary Boiler Requirements – (ES-3)

#### A. Auxiliary Boiler Limitations

1. Except where this permit is more restrictive than the applicable requirement, the auxiliary boiler shall be operated in compliance with the requirements of 40 CFR 60, Subpart Db.

(9 VAC 5-80-110, 9 VAC 5-50-400 and 9 VAC 5-50-410)

2. Emissions from the auxiliary boiler shall be controlled by the use of No. 2 fuel oil (0.1 % sulfur by weight) and by good combustion operating practices. As an alternative to this requirement, the permittee may use fuel supplier certifications of "low sulfur diesel fuel" containing no greater than 0.05% sulfur to demonstrate compliance with the annual fuel sulfur content. A receipt specifying low sulfur diesel fuel may be considered a certification for purposes of this permit. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-50-410, 9 VAC 5-80-110, Condition I.7 and Conditions I.30 and I.31 of September 4, 2002 Permit)

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3. The auxiliary boiler shall consume no more than 165.8 x 10<sup>9</sup> Btu of No. 2 fuel oil per year, calculated as the sum of each consecutive twelve (12) month period. (9 VAC 5-80-110 and Condition I.16 of September 4, 2002 Permit)

4. Emissions from the operation of the auxiliary boiler shall not exceed the limits specified below:

PM	$0.03 \text{ lbs/}10^6 \text{ Btu}$	6.4 lbs/hr	2.4 tons/yr
PM10	0.03 lbs/10 <sup>6</sup> Btu	6.4 lbs/hr	2.4 tons/yr
Sulfur Dioxide	0.11 lbs/10 <sup>6</sup> Btu	23.5 lbs/hr	9.1 tons/yr
Nitrogen Oxides (as NO <sub>2</sub> )	0.20 lbs/10 <sup>6</sup> Btu	42.8 lbs/hr	16.5 tons/yr
СО	$0.16  \mathrm{lbs/10^6}  \mathrm{Btu}$	34.2 lbs/hr	13.2 tons/yr
Volatile Organic Compounds	$0.012 \text{ lbs/}10^6 \text{ Btu}$	2.6 lbs/hr	1.0 tons/yr

SO<sub>2</sub> based on 0.1 % sulfur (by weight) fuel.

(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition I.20 of September 4, 2002 Permit)

- 5. Visible Emissions from the auxiliary boiler stack shall not exceed 10 % opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 20 % opacity. The opacity standard applies at all times, except during periods of start-up, shutdown or malfunction in accordance with 40 CFR, Subpart Db, Section 60.43b(g).
  - (9 VAC 5-50-80, 9 VAC 5-80-110, and Condition I.24 of September 4, 2002 Permit)
- 6. The auxiliary boiler shall not be operated when one or both of the main coal boilers are on line. "On line" is defined for this condition as the point at which steam generated by the boilers is supplied to the steam turbine for purpose of generating electrical power.
  - (9 VAC 5-80-110 and Condition I.22a of September 4, 2002 Permit)

## **B.** Auxiliary Boiler Monitoring

1. CEMS shall be installed on the auxiliary boiler in accordance with the applicable New Source Performance Standard at 40 CFR 60, Subpart Db. They shall be maintained and calibrated in accordance with 40 CFR 60.13. A 30-day notification prior to the demonstration of continuous monitoring system performance and subsequent notifications, are to be submitted to the South Central Regional Office. (9 VAC 5-80-110 and Condition I.33 of September 4, 2002 Permit)

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2. The continuous monitoring data generated by the CEMS on the boiler shall be used to determine compliance with the emissions and opacity standards. All of the data capture, quality assurance provisions, and reporting requirements of 40 CFR 60, Subpart Db shall apply.

(9 VAC 5-80-110 and Condition I.36 of September 4, 2002 Permit)

# C. Auxiliary Boiler Recordkeeping

- 1. The permittee shall obtain a certification from the fuel supplier with each shipment of No. 2 fuel oil. Each fuel supplier certification shall include the following:
  - a. The name of the fuel supplier,
  - b. The date on which the oil was received,
  - c. The volume of fuel oil delivered in the shipment,
  - d. A statement that the oil complies with the American Society for Testing and Materials specifications for No. 2 fuel oil,
  - e. The sulfur content of the oil, and
  - f. Fuel supplier certifications of "low sulfur diesel fuel", if applicable. A receipt specifying low sulfur diesel fuel may be considered a certification for purposes of this permit.
  - (9 VAC 5-50-410 and 9 VAC 5-80-110)
- 2. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the South Central Regional Office. These records shall include, but are not limited to:
  - a. The daily and annual throughput of No. 2 fuel oil (in 1000 gallons) for the auxiliary boiler. The annual throughput shall be calculated as the sum of each consecutive twelve (12) month period.
  - b. All fuel supplier certifications. A receipt specifying low sulfur diesel fuel may be considered a certification for purposes of this permit.
  - c. All CEMs records as required by Condition IV.B.2.

These records shall be available on site for inspection by the Department and shall be current for the most recent five (5) years. (9 VAC 5-50-50 and 9 VAC 5-80-110)

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## D. Auxiliary Boiler Testing

The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.

(9 VAC 5-50-30 and 9 VAC 5-80-110)

# E. Auxiliary Boiler Reporting

The permittee shall submit fuel quality reports to the South Central Regional Office, within 30 days after the end of each semi-annual period. This submittal will be arranged with the Department such that the required reports may be incorporated with required quarterly reports. If no shipments of fuel oil were received during the semi-annual period, the semi-annual report shall consist of the dates included in the semi-annual period and a statement that no oil was received during the semi-annual period. If fuel oil was received during the semi-annual period, the reports shall include:

- 1. The dates included in the semi-annual period
- 2. A copy of all fuel supplier certifications for all shipments of No. 2 fuel oil or "low sulfur diesel fuel" received during the semi-annual period or a semi-annual summary from each fuel supplier that includes the information specified in Condition IV.C.1. for each shipment of No. 2 fuel oil. A receipt specifying low sulfur diesel fuel may be considered a certification for purposes of this permit;
- 3. All CEMs reporting requirements as required in Condition IV.B.2; and
- 4. A signed statement from the owner or operator of the facility that the fuel supplier certifications or summaries of fuel supplier certifications represent all of the No. 2 fuel oil and/or "low sulfur diesel fuel" burned or received at the facility.

(9 VAC 5-50-50 and 9 VAC 5-80-110)

# V. Coal and Ash Handling, Limestone and Lime Handling Equipment Requirements – (ES-4 (a-0) and ES-7 (a-c), ES-5 (a-d) and ES-6 (a-b))

# A. Limitations

- 1. Fugitive dust emissions from coal unloading, feeding and conveying shall be controlled as necessary to comply with opacity limits as stated in Condition V.A.7. Railcars unloading coal shall be housed in an open-ended shelter. Unloading of coal to the storage piles shall be via a radial stacker.
  - (9 VAC 5-80-110 and Condition I.9 of September 4, 2002 Permit)

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- 2. The coal crusher and pulverizers shall be totally enclosed to prevent fugitive dust emissions.
  - (9 VAC 5-80-110 and Condition I.10 of September 4, 2002 Permit)
- 3. All loaded conveyor belts located outside of buildings shall be enclosed with weather tight covers or Department-approved alternatives including three-quarter covers and all returns equipped with a scraper system. Scrapings shall be returned in an enclosed manner to the main flow of material. Return conveyor belts shall be enclosed on one side with wind guards.
  - (9 VAC 5-80-110 and Condition I.11 of September 4, 2002 Permit)
- 4. Fugitive dust emissions from the fly ash shall be controlled by mixing with water or wet flue gas desulfurization by-product. Fly ash may be handled dry into fully enclosed trucks.
  - (9 VAC 5-80-110 and Condition I.12 of September 4, 2002 Permit)
- 5. Reserve coal stockpiles will be treated with a crusting agent on a frequency as approved by the Department to minimize emissions during storage. Both working and reserve coal stockpiles will employ wet suppression during pile loading and unloading as necessary to minimize emissions.
  - (9 VAC 5-80-110 and Condition I.13 of September 4, 2002 Permit)
- 6. Visible emissions from all baghouse sources identified in Condition V.A.8 shall not exceed 5% opacity.
  - (9 VAC 5-50-80, 9 VAC 5-80-110, Condition 25 of September 4, 2002 Permit, 40 CFR 60.252(c) and 40 CFR 60.672)
- Visible emissions from the coal handling and lime handling processes identified in Condition V.A.9 shall not exceed 10% opacity.
   (9 VAC 5-50-80, 9 VAC 5-80-110, Condition I.25 of September 4, 2002 Permit, 40 CFR 60.252(c) and 40 CFR 60.672)
- 8. Particulate emissions from the following materials handling operations will be controlled by fabric filter dust collectors:

## Coal Handling (ES-4 (f-o)):

- Coal Track Hopper (includes Coal hopper feeder to conv. #1, Conv. #1, Conv. #1 transfer to conv. #2, and Conv. #2)
- Crusher House (includes Conv. #2 transfer to boom (#5) conv., Conv. #8a and #8b transfer to crusher, Coal crushing, Coal crush feed to conv. #9a, Boom (#5) conv., and Conv. #9a and #9b together)
- Unit #1 Coal Silo Bin Vent (Conv. #3 transfer to coal silo #1)
- Unit #1 Coal Silo Reclaim Area (Coal reclaim hopper feed and conv #8a and #8b, Conv. #8a and #8b together)
- Conveyor #3 Discharge (Conv. #3 transfer to conv. #4, Conv. #4)

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- Unit #1 Plant Silo Area (Conv. #9a and #9b transfer to conv. # 10a and #10b, Conv. # 9a and #9b transfer to conv #11a and #11b, Conv. #10a and #10b, Conv. #11a and 11b, Conv. #10a and #10b transfer to plant coal site)
- Unit #2 Coal Silo Bin (Conv. #4 transfer to coal silo #2)
- Unit #2 Coal Silo Reclaim Area (Coal silo #2 feed to conv. #6a and #6b)
- Unit #2 Plant Silo Bin Vent (Conv. #11a and #11b transfer to plant coal silo)

#### Limestone Handling (ES-5 (b-d)):

- Limestone Track Hopper (Limestone hopper feed to conv. #1, Conv. #1, Conv. #1 transfer to conv. #2, Conv. #2)
- Limestone Reclaim Hopper (Reclaim feed transfer to conv. #3, Conv. #3)
- Limestone Silo Area (Conv. #3 transfer to 1st silo, Conv. #3 transfer to conv. #4, Conv. #4, Conv. #4 transfer to 2nd silo, Conv. #4 transfer to conv. #5, Conv. #5, Conv. #5 transfer to 3rd silo)

# Lime Handling (ES-6 (a-b)):

- Lime Track Hopper (Lime track hopper unloading)
- Bulk Lime Silo (Lime silo bin vent)

## Fly Ash Handling (ES-7 (a-c)):

- Unit #1 Fly Ash Silo (Fly ash transfer to ash silo #1a)
- Pug Mill/Shuttle Conveyor (Transfer from Pug Mills #1a and #2a Shuttle Conveyors)
- Unit #2 Fly Ash Silo (Fly ash silo transfer to ash silo #2a)

The fabric filters shall be provided with adequate access for inspection. (9 VAC 5-80-110, 9 VAC 5-50-260, and Condition I.21a of September 4, 2002 Permit)

- 9. Particulate emissions from the coal handling (ES-4 (a-e) includes radial pile equipment traffic, Radial Stacker (Conveyor #6), rail car unloading to hopper, boom transfer to radial stacker, and radial stacker transfer to radial pile) and limestone handling (ES-5 (a) includes limestone conveyor transfer to storage pile) operations will be controlled by equipment design, operating practice, and, where appropriate, wet suppression as necessary.
  - (9 VAC 5-80-110, 9 VAC 5-50-260, and Condition I.21b of September 4, 2002 Permit)
- 10. Except where this permit is more restrictive than the applicable requirement, coal handling and processing equipment shall be operated in compliance with the requirements of 40 CFR 60, Subpart Y.
  - (9 VAC 5-80-110, 9 VAC 5-50-400 and 9 VAC 5-50-410)
- 11. Except where this permit is more restrictive than the applicable requirement, limestone handling and processing equipment shall be operated in compliance with the requirements of 40 CFR 60, Subpart OOO.
  - (9 VAC 5-80-110, 9 VAC 5-50-400 and 9 VAC 5-50-410)

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# B. Coal and Ash Handling Equipment Monitoring and Recordkeeping

Visual emission observations from the fabric filter exhaust stacks shall be conducted at least once per week. If visible emissions are observed, the permittee shall:

- a. Take timely corrective action such that the fabric filter resumes normal operation and there are no visible emissions from the fabric filter exhaust stack, or
- b. Perform a visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions from the fabric filter do not exceed five (5) % opacity. The VEE shall be conducted for a minimum of six minutes. If any of the observations exceed five (5) %, the VEE shall be conducted for a total of 60 minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the fabric filter resumes operation with visible emissions of 5 % or less.

Records shall be maintained, stating the date and time of each visible emissions check and whether visible emissions were observed, results of all VEEs, the observer's name and any required corrective action taken. Visible emissions checks are not required during start-ups, shut-downs, and malfunctions. These records shall be available on site for inspection by the Department and shall be current for the most recent five (5) years. (9 VAC 5-50-20)

## C. Coal and Ash Handling Equipment Testing

The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.

(9 VAC 5-50-30 and 9 VAC 5-80-110)

# **VI.** Emergency Generators – (IS-1)

#### **A.** Emergency Generators Limitations

1. Emissions from the emergency generators shall be controlled by the use of No. 2 fuel oil (0.1 % sulfur by weight) and by good combustion operating practices. As an alternative to this requirement, the permittee may use fuel supplier certifications of "low sulfur diesel fuel" containing no greater than 0.05% sulfur to demonstrate compliance with the annual fuel sulfur content. A receipt specifying low sulfur diesel fuel may be considered a certification for purposes of this permit. The emergency generators shall be provided with adequate access for inspection. A change in the fuels may require a permit to modify and operate.

(9 VAC 5-50-410, 9 VAC 5-80-110 and Conditions I.8, I.30 and I.31 of September 4, 2002 Permit)

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Each emergency generator shall not operate more than 60 hours per year for maintenance and testing. During this time, each generator shall be operated at either a loaded condition with no more than one of the two main boilers in operation or a no-load condition with one or two main boilers in operation.
 (9 VAC 5-80-110 and Condition I.23 of September 4, 2002 Permit)

3. Visible emissions from the emergency generators shall not exceed 10% opacity. (9 VAC 5-50-80, 9 VAC 5-80-110, and Condition I.25 of September 4, 2002 Permit)

# B. Emergency Generators Monitoring and Recordkeeping

- 1. The permittee shall obtain a certification from the fuel supplier with each shipment of No. 2 fuel oil. Each fuel supplier certification shall include the following:
  - a. The name of the fuel supplier,
  - b. The date on which the oil was received,
  - c. The volume of fuel oil delivered in the shipment,
  - d. A statement that the oil complies with the American Society for Testing and Materials specifications for No. 2 fuel oil,
  - e. The sulfur content of the oil, and
  - f. Fuel supplier certifications of "low sulfur diesel fuel", if applicable. A receipt specifying low sulfur diesel fuel may be considered a certification for purposes of this permit.

(9 VAC 5-50-410 and 9 VAC 5-80-110)

2. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the South Central Regional Office. These records shall include, but are not limited to: the hours of operation of each emergency generator. These records shall be available on site for inspection by the Department and shall be current for the most recent five (5) years.

(9 VAC 5-50-50, 9 VAC 5-80-110)

## C. Emergency Generators Testing

The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.

(9 VAC 5-50-30 and 9 VAC 5-80-110)

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# VII. Facility Wide Conditions

#### A. Limitations

 Fugitive emissions from all external or frequently traveled facility access roads shall be controlled by paving. Fugitive emissions from all paved facility roads shall be controlled through frequent sweeping or roadway washing. Emissions from unpaved roads shall be controlled by wetting as necessary. If operating mechanical sweepers, water shall be used to suppress dust during sweeper operation.
 (9 VAC 5-170-160, 9 VAC 5-80-110, and Condition I.14 of September 4, 2002 Permit)

Except as specified otherwise in this permit, visible emissions from all emission points shall not exceed 10% opacity.
 (9 VAC 5-170-160, 9 VAC 5-80-110, and Condition I.25 of September 4, 2002 Permit)

# VIII. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
none		

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law. (9 VAC 5-80-140)

# IX. Title IV Requirements

1. The Phase II acid rain permit for this facility, issued pursuant to Chapter 80, Part II, Article 3 (9 VAC 5-80-360 et seq.) on January 1, 2003 and expiring on December 31, 2007, is incorporated by reference into this permit. A copy of that acid rain permit is attached.

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- 2. Where an applicable requirement of the Clean Air Act, or of this permit, is more stringent than an applicable requirement from state or federal regulations promulgated under Title IV of the Clean Air Act, both provisions appear in this Permit and both are enforceable by the Administrator of the U.S. Environmental Protection Agency. (40 CFR Part 70, section 70.6(a)(1)(ii))
- 3. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to Title IV of the federal Clean Air Act or Chapter 80, Part II, Article 3, provided that such increases do not require a permit revision under any other applicable requirement.

(40 CFR Part 70, section 70.6(a)(4)(i))

4. This facility may hold any number of allowances authorized by its acid rain permit. But the source may not use these allowances as a defense to a non-compliance with any other applicable requirement.

(40 CFR Part 70, section 70.6(a)(4)(ii))

5. Any allowance authorized by this facility's acid rain permit shall be accounted for according to procedures established under Chapter 80, Part II, Article 3 or under federal regulations pursuant to Title IV of the Clean Air Act.

(40 CFR Part 70, section 70.6(a)(4)(iii))

6. Nothing in this Permit shall alter or affect the applicable requirements of the acid rain program pursuant to Title IV of the Clean Air Act.

(40 CFR Part 70, section 70.6(f)(3)(iii))

## X. General Conditions

# A. Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

(9 VAC 5-80-110 N)

#### **B.** Permit Expiration

This permit shall become invalid five years from the date of issuance. Permit expiration terminates the source's right to operate. The permittee shall submit an application for renewal of this permit no earlier than 18 months and no later than six months prior to the date of expiration of this permit. Upon receipt of a complete and timely application for renewal, this source may continue to operate subject to final action by the Department on the renewal application.

(9 VAC 5-80-110 D, 9 VAC 5-80-170B, and 9 VAC 5-80-80 F)

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# C. Recordkeeping and Reporting

- 1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
  - a. The date, place as defined in the permit, and time of sampling or measurements.
  - b. The date(s) analyses were performed.
  - c. The company or entity that performed the analyses.
  - d. The analytical techniques or methods used.
  - e. The results of such analyses.
  - f. The operating conditions existing at the time of sampling or measurement.
  - (9 VAC 5-80-110 F)
- 2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original electronic recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. (9 VAC 5-80-110 F)
- 3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than <u>March 1</u> and <u>September 1</u> of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
  - a. The time period included in the report.
  - b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:
    - (1) Exceedance of emissions limitations or operational restrictions;
    - (2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,
    - (3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

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# **D.** Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to ' 114(a)(3) and ' 504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

- 1. The time period included in the certification. The time period to be addressed is January 1 to December 31.
- 2. A description of the means for assessing or monitoring the compliance of the source with its emissions limitations, standards, and work practices.
- 3. The identification of each term or condition of the permit that is the basis of the certification.
- 4. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the certification period.
- 5. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
- 6. The status of compliance with the terms and conditions of this permit for the certification period.
- 7. Such other facts as the permit may require to determine the compliance status of the source.

One copy of the annual compliance certification shall be sent to EPA at the following address:

Clean Air Act Title V Compliance Certification (3AP00) U.S. Environmental Protection Agency, Region III 1650 Arch Street Philadelphia, PA 19103-2029.

(9 VAC 5-80-110 K.5)

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# E. Permit Deviation Reporting

The permittee shall notify the South Central Regional Office, within four daytime business hours of any deviations from permit requirements which caused excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the occurrence, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation, unless the facility otherwise submits reports of excess emissions pursuant to 9 VAC 5-50-50C. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition X.C.3.

(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

# F. Failure/Malfunction Reporting

If, for any reason, the affected facilities or related air pollution control equipment fails or malfunctions and may cause excess emissions for more than one hour, the owner shall notify the South Central Regional Office, within four (4) daytime business hours of the occurrence. In addition, the owner shall provide a written statement, within 14 days, explaining the problem, corrective action taken, and the estimated duration of the breakdown/shutdown.

(9 VAC 5-20-180 C)

# G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.

(9 VAC 5-80-110 G.1)

## H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit, including those terms and conditions set forth in a tabular format. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.

(9 VAC 5-80-110 G.2)

# I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-110 G.3)

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#### J. Permit Action for Cause

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause as specified in 9 VAC 5-80-110 L, 9 VAC 5-80-240 and 9 VAC 5-80-260. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

(9 VAC 5-80-110 G.4)

- 2. Such changes that may require a permit modification and/or revisions include, but are not limited to, the following:
  - a. Erection, fabrication, installation, addition, or modification of an emissions unit (which is the source, or part of it, which emits or has the potential to emit any regulated air pollutant), or of a source, where there is, or there is potential of, a resulting emissions increase;
  - b. Reconstruction or replacement of any emissions unit or components thereof such that its capital cost exceeds 50% of the cost of a whole new unit;
  - c. Any change at a source which causes emission of a pollutant not previously emitted, an increase in emissions, production, throughput, hours of operation, or fuel use greater than those allowed by the permit, or by 9 VAC 5-80-11, unless such an increase in authorized by an emissions cap; or any change at a source which causes an increase in emissions resulting from a reduction in control efficiency, unless such an increase is authorized by an emissions cap;
  - d. Any reduction of the height of a stack or of a point of emissions, or the addition of any obstruction which hinders the vertical motion of exhaust;
  - e. Any change at the source which affects its compliance with conditions in this permit, including conditions relating to monitoring, recordkeeping, and reporting;
  - f. Addition of an emissions unit which qualifies as insignificant by emissions rate (9 VAC 5-80-720 B) or by size or production rate (9 VAC 5-80-720 C);
  - g. Any change in insignificant activities, as defined by 9 VAC 5-80-90 D.1.a(1) and 9 VAC 5-80-720 B and 9 VAC 5-80-720 C.

(9 VAC 5-80-110 G, 9 VAC 5-80-110 J, 9 VAC 5-80-240, and 9 VAC 5-80-260)

## **K.** Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. (9 VAC 5-80-110 G.5)

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#### L. Duty to Submit Information

1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.

(9 VAC 5-80-110 G.6)

2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.

(9 VAC 5-80-110 K.1)

# M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-305 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-355. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by **April 15** of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department. (9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

# N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

- 1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
- 2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
- 3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;

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4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and.

5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-40-90 and 9 VAC 5-50-90)

# O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-50-20)

# P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a written or electronic log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1. The alternative operating scenario is to haul ash and/or FGD by-product directly to a marketer rather than to the landfill.

(9 VAC 5-80-110 J)

## Q. Inspection and Entry Requirements

The permittee shall allow Department, upon presentation of credentials and other documents as may be required by law, to perform the following:

- 1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
- 2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.

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3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.

4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

# **R.** Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

- 1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- 2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- 3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

#### S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to Department upon request. (9 VAC 5-80-150 E)

#### T. Transfer of Permits

1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another. (9 VAC 5-80-160)

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2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200. (9 VAC 5-80-160)

3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200. (9 VAC 5-80-160)

#### U. Malfunction as an Affirmative Defense

- 1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the conditions of paragraph 2 are met.
- 2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
  - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction
  - b. The permitted facility was at the time being properly operated.
  - c. During the period of malfunction, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit.
  - d. For malfunctions that occurred for one hour or more, the permittee submitted to the Board by the deadlines established in 9 VAC 5-80-250 B 4, a notice and written statement containing a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notice fulfills the requirement of 9 VAC 5-80-110 F.2.b to report promptly deviations from permit requirements.
    - (1) A notice of the malfunction by facsimile transmission, telephone or telegraph as soon as practicable but no later than four daytime business hours of the time when the emission limitations were exceeded due to the malfunction.
    - (2) A written statement describing the malfunction no later than two weeks following the day the malfunction occurred.

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3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any requirement applicable to the source.

(9 VAC 5-80-250)

# V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the permittee knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe, any permit for any of the grounds for revocation or termination or for any other violations of these regulations. (9 VAC 5-80-260)

# W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit. (9 VAC 5-80-80 E)

#### X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F. (40 CFR Part 82, Subparts A-F)

#### Y. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68. (40 CFR Part 68)

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# Z. Changes to Permits for Emissions Trading

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

(9 VAC 5-80-110 I.1)

# **AA.** Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

- 1. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
- 2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
- 3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I.2)

#### **BB.** Operational Flexibility

The provisions of 9 VAC 5-80-280 regarding operational flexibility apply. (9 VAC 5-80-280)

# **XI.** NOx Allowance Budget Trading Permit Requirements

#### A. General Conditions

 A review of the air emission units included in this permit approval has determined that the equipment listed in the following table meets the definition of a NOx Budget Unit and is subject to the NOx Budget emission limitations under 9 VAC 5-140-40 or for opt-in sources 9 VAC 5-140-800. As required by 9 VAC 5-140-200 A, for each NOx Budget source required to have a federally enforceable permit. This section represents the NOx Budget Trading permit.

(9 VAC 5-140-40 or 9 VAC 5-140-800)

2. The NOx Budget Trading permit will be administrated by the VADEQ under the authority of 9 VAC Chapter 80, Part II, Articles 1 and 3 (9 VAC 5-80-50 et seq. and 9 VAC 5-80-360 et. seq.) and 9 VAC 5, Chapter 140, Part I (9 VAC 5-140-10 et seq.). (9 VAC 5-140-200 A)

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3. The following air emission units have been determined to meet the applicability requirements as provided in 9 VAC 5-140-40 A.1 and A.2. Units that do not meet this definition, are not defined as 25-Ton Exemption Units and are not permanently shutdown can be included in the NOx Budget Trading program as "opt-in" air emission sources.

(9 VAC 5-140-40 A) or (9 VAC 5-140-800).

	Table XI-1 Facility NOx Budget Units						
Facility Unit NATS Code Unit Name and Description		Maximum Heat Capacity (MMBtu/hr)	Maximum Generation Capacity (megawatts)				
ES-1	007213000001	Combustion Engineering pulverized coal boiler	4,085 MMBtu/hr (nominal)	466			
ES-2	007213000002	Combustion Engineering pulverized coal boiler	4,085 MMBtu/hr (nominal)	466			

4. This NOx Budget Trading permit will become effective on May 31, 2004. (9 VAC 5-140-240.1)

# **B.** Standard Requirements

- 1. Continuous Monitoring Requirements
  - a. The owners and operators and, to the extent applicable, the NOx authorized account representative of each NOx Budget source and each NOx Budget unit at the source shall comply with the monitoring requirements of 9 VAC 5, Chapter 140, Part I, Article 8 (9 VAC 5-140-700 et seq.).
     (9 VAC 5-140-60 B.1)
  - b. The emissions measurements recorded and reported in accordance with 9 VAC 5 Chapter 140 Part I, Article 8 (9 VAC 5-140-700 et. seq.) and subparts H of 40 CFR 75 and 40 CFR part 97 shall be used to determine compliance by the unit with the NOx Budget emissions limitation under paragraphs B.2.a through B.2.h. (9 VAC 5-140-60 B.2)

#### 2. Nitrogen oxides requirements

a. The owners and operators of each NOx Budget source and each NOx Budget unit at the source shall hold NOx allowances available for compliance deductions under 9 VAC 5-140-540 A, B, E, or F, as of the NOx allowance transfer deadline, in the unit's compliance account and the source's overdraft account in an amount not less than the total NOx emissions for the control period from the unit, as determined in accordance with 9 VAC 5, Chapter 140, Part I, Article 8 (9 VAC 5-140-700 et seq.), plus any amount necessary to account for actual utilization under 9 VAC 5-140-420 E for the control period or to account for excess emissions for a prior control period under 9 VAC 5-140-540 D or to account for withdrawal from

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the NOx Budget Trading Program, or a change in regulatory status, of a NOx Budget opt-in unit under 9 VAC 5-140-860 or 9 VAC 5-140-870. (9 VAC 5-140-60 C.1)

Each ton of nitrogen oxides emitted in excess of the NOx Budget emissions limitation shall constitute a separate violation of 9 VAC 5, Chapter 140, Part I, the Clean Air Act, and applicable Virginia Air Pollution Law.
 (9 VAC 5-140-60 C.2)

c. A NOx Budget unit shall be subject to the requirements under 9 VAC 5-140-60 C.1 starting on the later of May 31, 2004 or the date on which the unit commences operation.

(9 VAC 5-140-60 C.3)

d. NOx allowances shall be held in, deducted from, or transferred among NOx Allowance Tracking System accounts in accordance with Article 5 (9 VAC 5-140-400 et seq.), Article 6 (9 VAC 5-140-500 et seq.), Article 7 (9 VAC 5-140-600 et seq.), and Article 9 (9 VAC 5-140-800 et seq.) of 9 VAC 5, Chapter 140, Part I.

(9 VAC 5-140-60 C.4)

e. A NOx allowance shall not be deducted, in order to comply with the requirements under 9 VAC 5-140-60 C.1 for a control period in a year prior to the year for which the NOx allowance was allocated.

(9 VAC 5-140-60 C.5)

f. A NOx allowance allocated by the permitting authority or the administrator under the NOx Budget Trading Program is a limited authorization to emit one ton of nitrogen oxides in accordance with the NOx Budget Trading Program. No provision of the NOx Budget Trading Program, the NOx Budget permit application, the NOx Budget permit, or an exemption under 9 VAC 5-140-50 and no provision of law shall be construed to limit the authority of the United States or the State to terminate or limit such authorization.

(9 VAC 5-140-60 C.6)

- g. A NOx allowance allocated by the permitting authority or the administrator under the NOx Budget Trading Program does not constitute a property right.
   (9 VAC 5-140-60 C.7)
- h. Upon recordation by the administrator under Article 6 (9 VAC 5-140-500 et seq.), Article 7 (9 VAC 5-140-600 et seq.), or Article 9 (9 VAC 5-140-800 et seq.) of 9 VAC 5, Chapter 140, Part I, every allocation, transfer, or deduction of a NOx allowance to or from a NOx Budget unit's compliance account or the overdraft account of the source where the unit is located is deemed to amend automatically, and become a part of, any NOx Budget permit of the NOx Budget unit by operation of law without any further review.

(9 VAC 5-140-60 C.8)

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# 3. Excess emissions requirements

- a. The owners and operators of a NOx Budget unit that has excess emissions in any control period shall:
  - (i) Surrender the NOx allowances required for deduction under 9 VAC 5-140-540 D 1; and
  - (ii) Pay any fine, penalty, or assessment or comply with any other remedy imposed under 9 VAC 5-140-540 D 3.

# C. Recordkeeping and Reporting Requirements

The following requirements concerning recordkeeping and reporting shall apply:

1. Unless otherwise provided, the owners and operators of the NOx Budget source and each NOx Budget unit at the source shall keep on site at the source each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the permitting authority or the administrator.

(9 VAC 5-140-60 E.1)

a. The account certificate of representation for the NOx authorized account representative for the source and each NOx Budget unit at the source and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with 9 VAC 5-140-130; provided that the certificate and documents shall be retained on site at the source beyond such fiveyear period until such documents are superseded because of the submission of a new account certificate of representation changing the NOx authorized account representative.

(9 VAC 5-140-60 E.1)

b. All emissions monitoring information, in accordance with 9 VAC 5, Chapter 140, Part I, Article 8 (9 VAC 5-140-700 et seq.); provided that to the extent that 9 VAC 5-140-700 et seq. provides for a three-year period for recordkeeping, the three-year period shall apply.

(9 VAC 5-140-60 E.1)

- c. Copies of all reports, compliance certifications, and other submissions and all records made or required under the NOx Budget Trading Program.
   (9 VAC 5-140-60 E.1)
- d. Copies of all documents used to complete a NOx Budget permit application and any other submission under the NOx Budget Trading Program or to demonstrate compliance with the requirements of the NOx Budget Trading Program.
   (9 VAC 5-140-60 E.1)

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2. The NOx authorized account representative of a NOx Budget source and each NOx Budget unit at the source shall submit the reports and compliance certifications required under the NOx Budget Trading Program, including those under Article 4 (9 VAC 5-140-300 et seq.), Article 8 (9 VAC 5-140-700 et seq.), or Article 9 (9 VAC 5-140-800 et seq.) of 9 VAC 5, Chapter 140, Part I.

(9 VAC 5-140-60 E.2)

# **D.** Testing for CEM Certification

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports will be provided at the appropriate locations.

(9 VAC 5-140-710)

## E. Liability

- 1. Any person who knowingly violates any requirement or prohibition of the NOx Budget Trading Program, a NOx Budget permit, or an exemption under 9 VAC 5-140-50 shall be subject to enforcement pursuant to applicable State or Federal law. (9 VAC 5-140-60 F.1)
- 2. Any person who knowingly makes a false material statement in any record, submission, or report under the NOx Budget Trading Program shall be subject to criminal enforcement pursuant to the applicable State or Federal law. (9 VAC 5-140-60 F.2)
- 3. No permit revision shall excuse any violation of the requirements of the NOx Budget Trading Program that occurs prior to the date that the revision takes effect.

(9 VAC 5-140-60 F.3)

4. Each NOx Budget source and each NOx Budget unit shall meet the requirements of the NOx Budget Trading Program.

(9 VAC 5-140-60 F.4)

5. Any provision of the NOx Budget Trading Program that applies to a NOx Budget source or the NOx authorized account representative of a NOx Budget source shall also apply to the owners and operators of such source and of the NOx Budget units at the source.

(9 VAC 5-140-60 F.5)

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6. Any provision of the NOx Budget Trading Program that applies to a NOx Budget unit or the NOx authorized account representative of a NOx budget unit shall also apply to the owners and operators of such unit. Except with regard to the requirements applicable to units with a common stack under 9 VAC 5, Chapter 140, Part I, Article 8 (9 VAC 5-140-700 et seq.), the owners and operators and the NOx authorized account representative of one NOx Budget unit shall not be liable for any violation by any other NOx Budget unit of which they are not owners or operators or the NOx authorized account representative and that is located at a source of which they are not owners or operators or the NOx authorized account representative.

(9 VAC 5-140-60 F.6)

#### F. Effect on Other Authorities

No provision of the NOx Budget Trading Program, a NOx Budget permit application, a NOx Budget permit, or an exemption under 9 VAC 5-140-50 shall be construed as exempting or excluding the owners and operators and, to the extent applicable, the NOx authorized account representative of a NOx Budget source or NOx Budget unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, the Clean Air Act. (9 VAC 5-140-60 G)